

weather of the last decade caused rapid melting and settling, and little snow remained below the 7,000-foot level at the end of the month. The highest districts showed a decrease of nearly one-half in the stored depth, indicating the loose character of the snow and its early passage into the streams of the State.

Oregon.—During every month of the past winter the snowfall was less than the average, and in many places it was less than the amount in any one of the last 10 or more years. December and January were cold months, having protracted periods with east winds, and the snow that fell had a small water content. February and March were mild months, and the water content of the snow was good, but the amount was small and much melting took place, so that at the end of March none was left except at high altitudes, and some of the southern slopes at relatively high altitudes were bare of snow. There will be a shortage of water for irrigation and placer mining during the late spring and early summer, and spring freshets will be of short duration.

South Dakota.—The average snowfall at 21 stations in the elevated regions of South Dakota—that is, the Black Hills region of the State—was 11.9 inches, which is about normal; however, there was a marked difference between the various amounts recorded. In parts of Lawrence and Fall River counties the accumulated amount for the month was nearly 2 feet, while in parts of Butte and Custer counties it was less than 4 inches. The average depth of snow on ground on the 15th was about 7.5 inches and at the end of the month about 7 inches. These amounts are somewhat smaller than at the corresponding times in February. The snow generally was packed very hard, and consequently contained much water. There will apparently be an ample amount of water for irrigation purposes. The streams were generally frozen over.

Utah.—In the Great Salt Lake watershed only a few correspondents reported that the snow stored in the mountains was equal to the average amount; most correspondents reported that the snow was unusually short and that the prospects were for a dry season if the irrigating water was not supplemented by rain during the summer. A very careful snow survey of City Creek Canyon showed that there was one-third less snow there than last year and that the snow was in condition for early melting.

In both the Sevier Lake and southern portion of the Colorado River watersheds the outlook was very promising, and some observers reported that the creeks were already bank full. A shortage was reported in the Green River watershed.

In the national forests of the State the snow was below normal in most places and in a favorable condition for early melting.

Washington.—The snowfall in the mountains and elevated valleys for the month of March was unusually light and was the least on record for this section. The month was remarkably mild in temperature and there were warm rains on the slopes and in the valleys. Hence the snow melted rapidly and by the middle of the month it had gone from the valleys and southern slopes, and at the end of the month there was no snow except on the summits, wooded northern slopes, and where it was packed in draws and gulches.

Wyoming.—Snowfall during the month of March was irregularly distributed. Depths on the watersheds of the Big Horn, North Platte, Powder, and Yellowstone rivers were substantially increased. No change in depth occurred on the watersheds of the Green, Snake, and Tongue rivers, while on the Cheyenne River and in the Yellowstone Park less snow lay on the ground than at the end of February. While the mean temperature for the month was below normal, there were many days on which melting occurred to a marked degree. The run-off was inappreciable, and subsequent freezing improved the condition of the snow for slow melting. Except for local irrigation, indications point to less than the normal amount of water from all watersheds. A marked deficiency is indicated for the Snake River and all streams taking their rise in Yellowstone Park.

MEAN LAKE LEVELS DURING MARCH.

By UNITED STATES LAKE SURVEY.

[Dated: Detroit, Mich., Apr. 6, 1915.]

The following data are reported in the "Notice to Mariners" of the above date:

Data.	Lakes.			
	Superior.	Michigan and Huron.	Erie.	Ontario.
Mean level during March, 1915:				
Above mean sea level at New York.....	<i>Fect.</i> 601.50	<i>Fect.</i> 579.57	<i>Fect.</i> 571.37	<i>Fect.</i> 245.27
Above or below—				
Mean stage of February, 1915.....	—0.20	—0.01	—0.04	+0.28
Mean stage of March, 1914.....	—0.42	—0.41	—0.11	—0.40
Average stage for March, last 10 years.....	—0.13	—0.56	—0.38	—0.63
Highest recorded March stage.....	—0.78	—3.38	—2.48	—2.54
Lowest recorded March stage.....	+0.84	+0.46	+0.54	+0.97
Probable change during April, 1915.....	0.0	+0.3	+0.7	+0.6